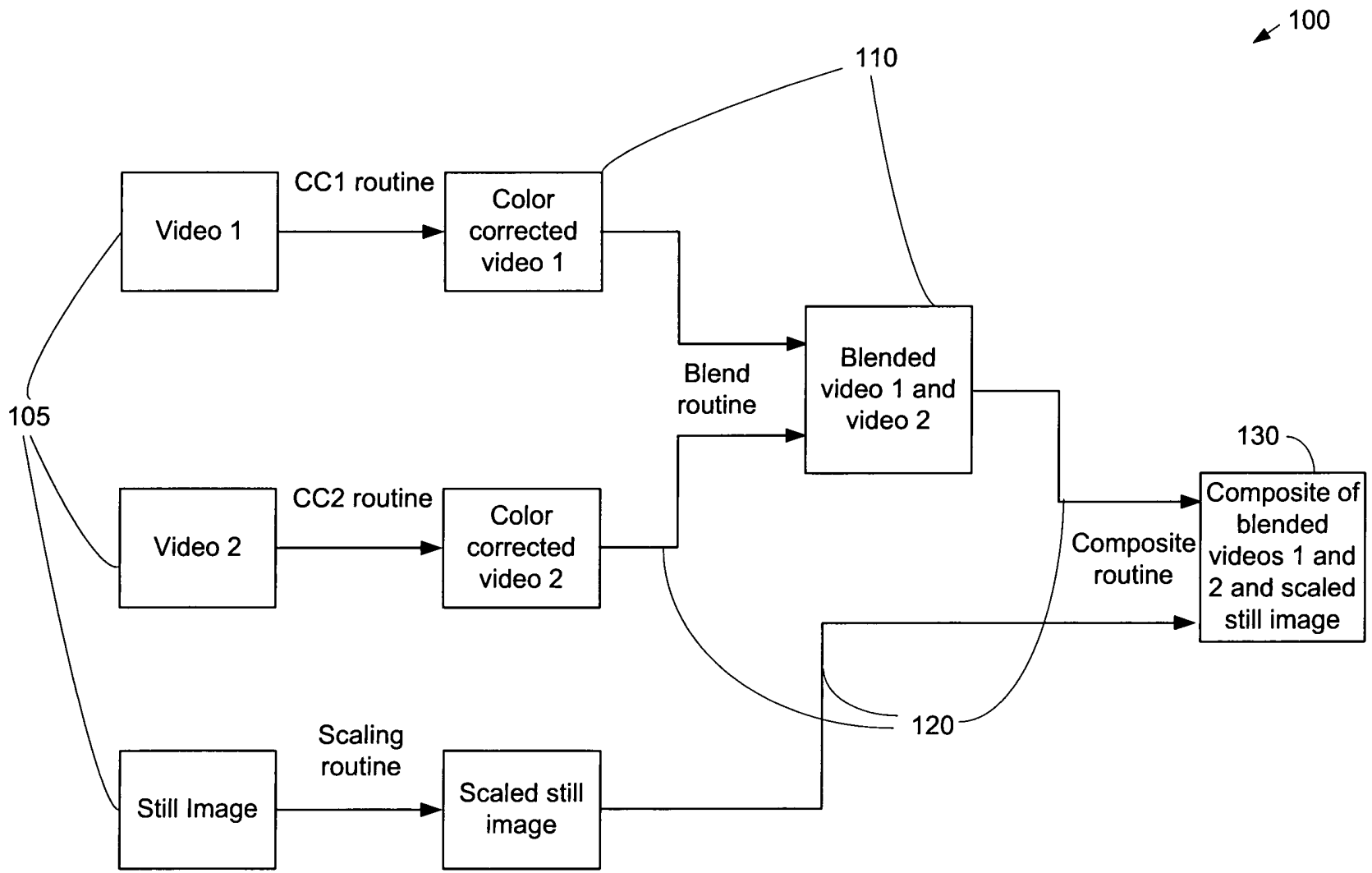
100
110
Video 1
CC1 routine
Color corrected video 1
105
Blend routine
Blended video 1 and video 2
130
Video 2
CC2 routine
Color corrected video 2
Composite routine
Composite of blended videos 1 and 2 and scaled still image
120
Still Image
Scaling routine
Scaled still image

Figure 1

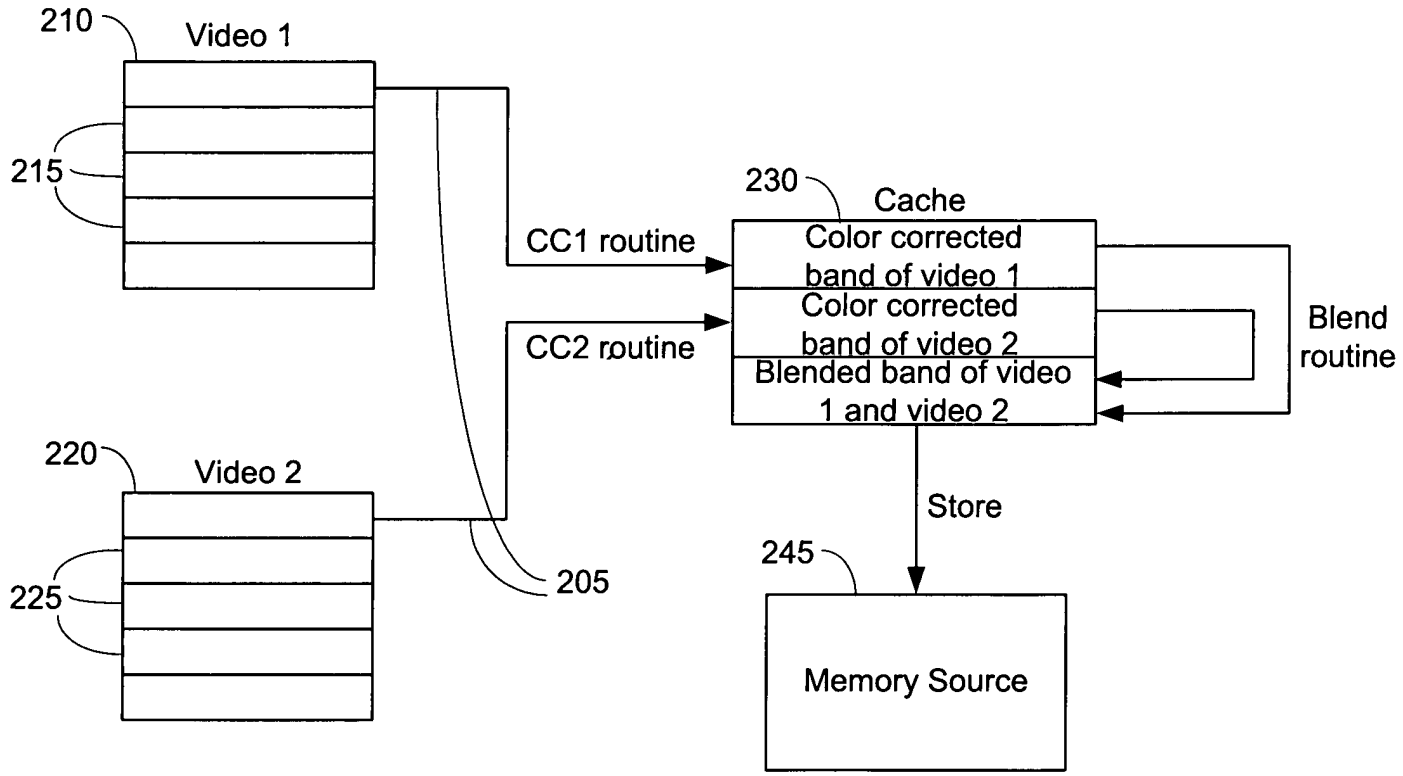
210
Video 1
215
230
Cache
CC1 routine
Color corrected band of video 1
Color corrected band of video 2
Blended band of video 1 and video 2
Blend routine
CC2 routine
220
Video 2
225
205
Store
245
Memory Source

Figure 2

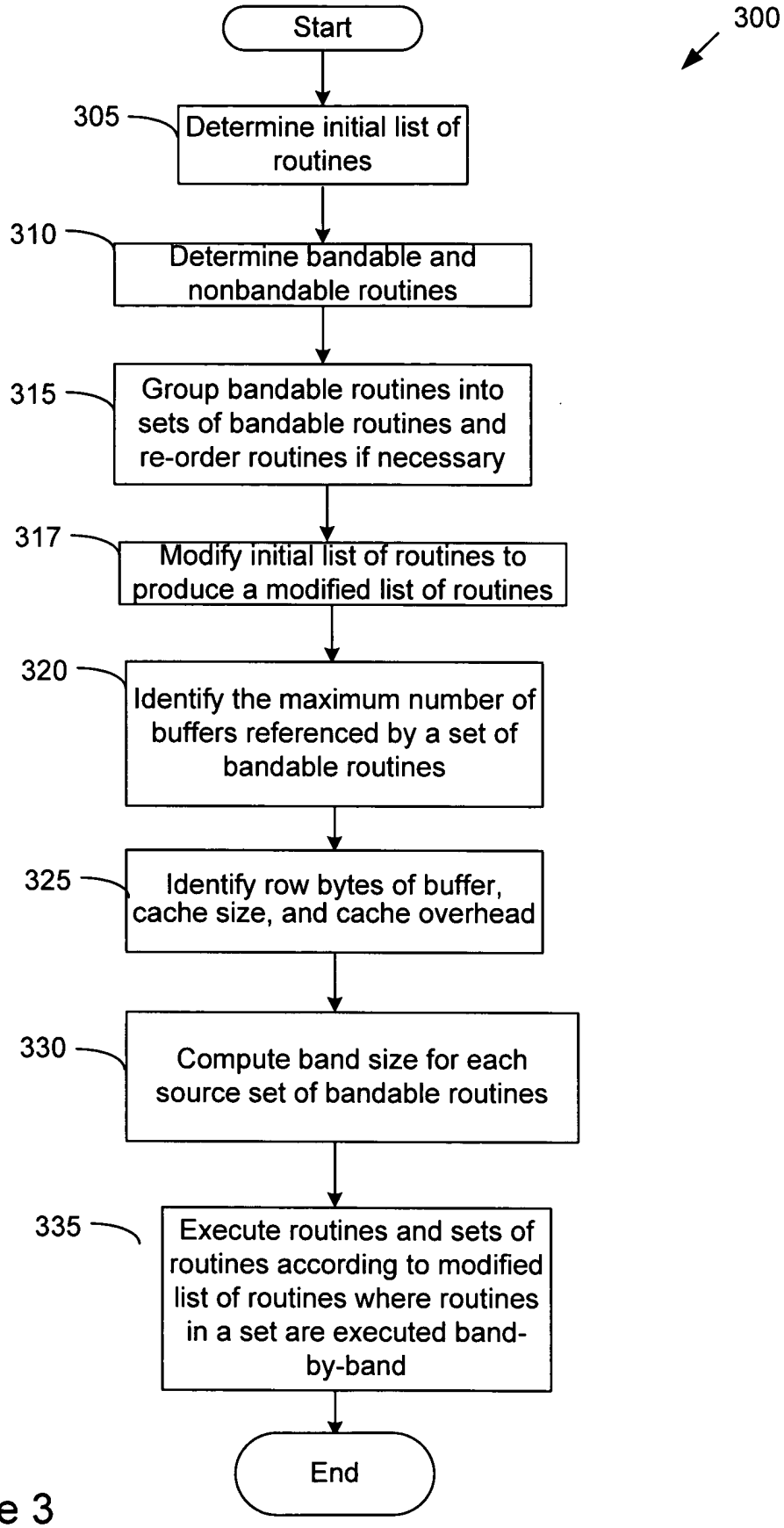
300
Start
305
Determine initial list of routines
310
Determine bandable and nonbandable routines
315
Group bandable routines into sets of bandable routines and re-order routines if necessary
317
Modify initial list of routines to produce a modified list of routines
320
Identify the maximum number of buffers referenced by a set of bandable routines
325
Identify row bytes of buffer, cache size, and cache overhead
330
Compute band size for each source set of bandable routines
335
Execute routines and sets of routines according to modified list of routines where routines in a set are executed band-by-band
End

Figure 3

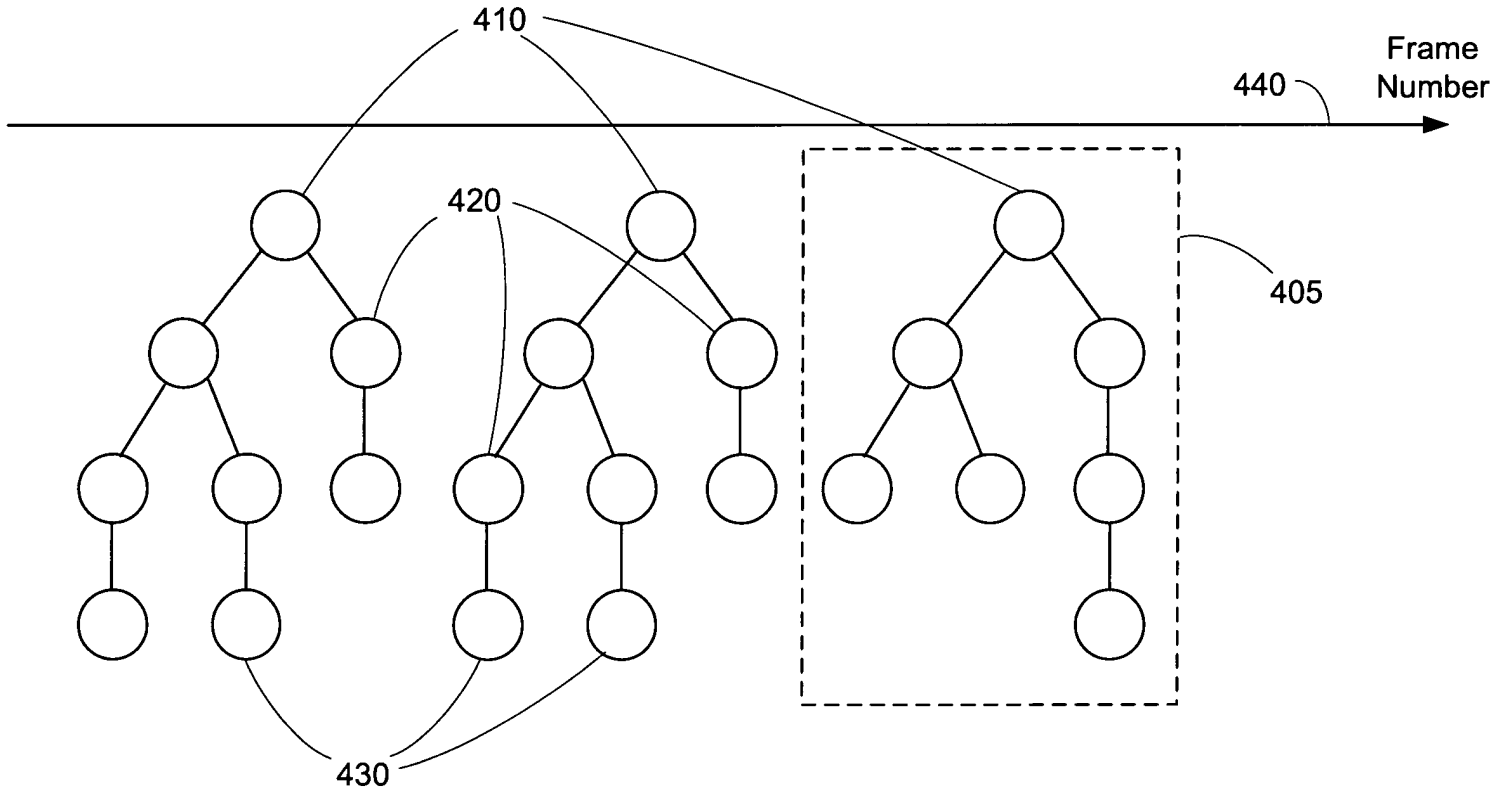

Figure 4

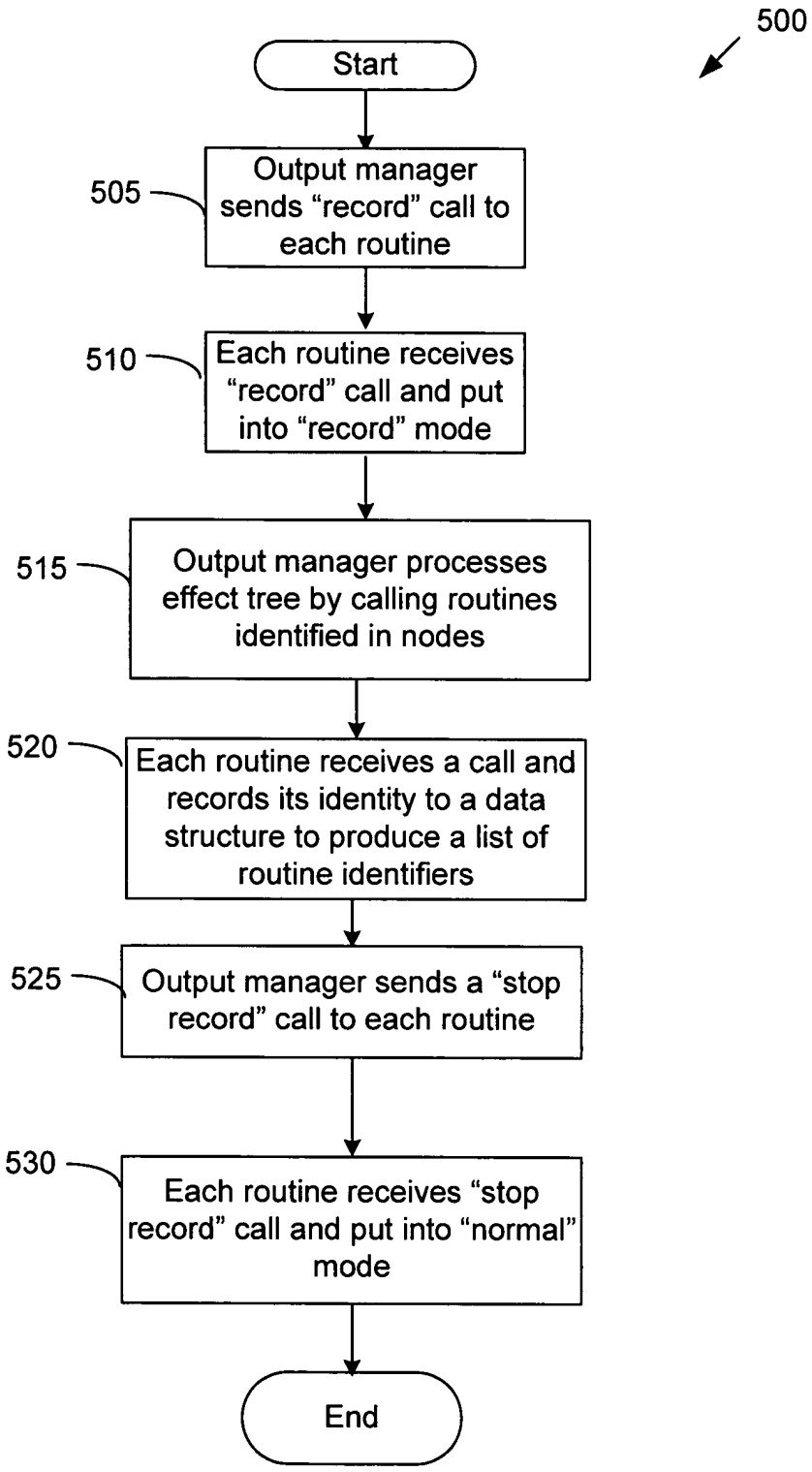
500
Start
505
Output manager sends "record" call to each routine
510
Each routine receives "record" call and put into "record" mode
515
Output manager processes effect tree by calling routines identified in nodes
520
Each routine receives a call and records its identity to a data structure to produce a list of routine identifiers
525
Output manager sends a "stop record" call to each routine
530
Each routine receives "stop record" call and put into "normal" mode
End

Figure 5

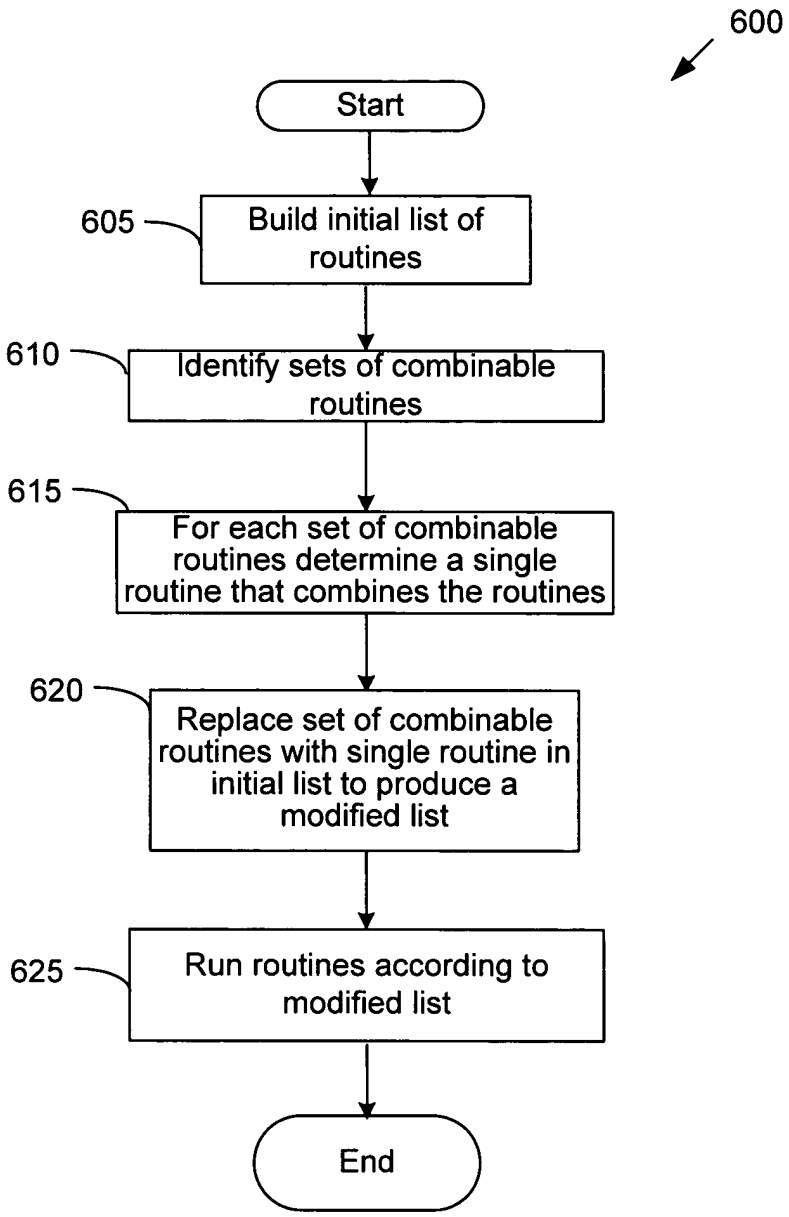
600
Start
605
Build initial list of routines
610
Identify sets of combinable routines
615
For each set of combinable routines determine a single routine that combines the routines
620
Replace set of combinable routines with single routine in initial list to produce a modified list
625
Run routines according to modified list
End

Figure 6

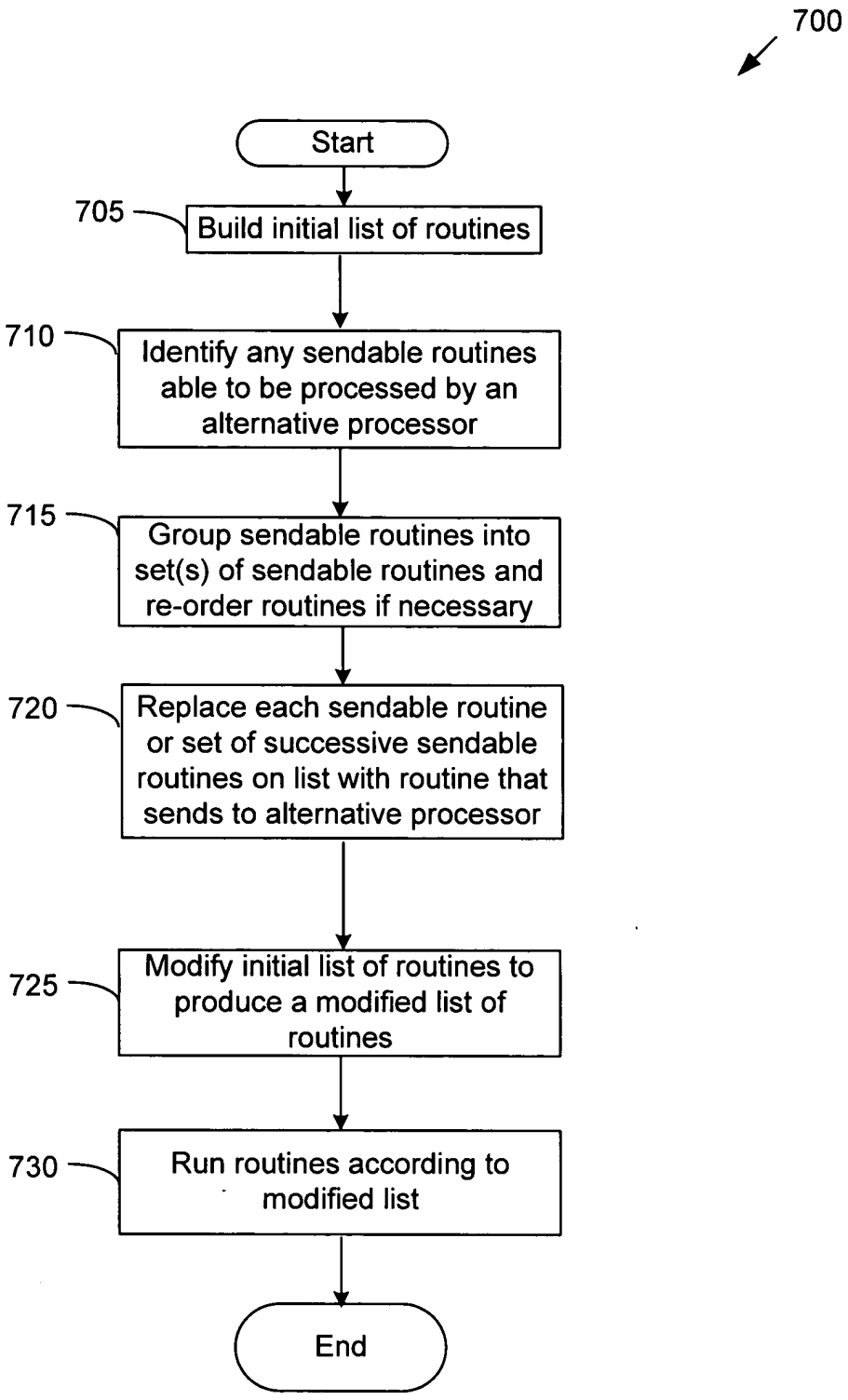
700
Start
705
Build initial list of routines
710
Identify any sendable routines able to be processed by an alternative processor
715
Group sendable routines into set(s) of sendable routines and re-order routines if necessary
720
Replace each sendable routine or set of successive sendable routines on list with routine that sends to alternative processor
725
Modify initial list of routines to produce a modified list of routines
730
Run routines according to modified list
End

Figure 7

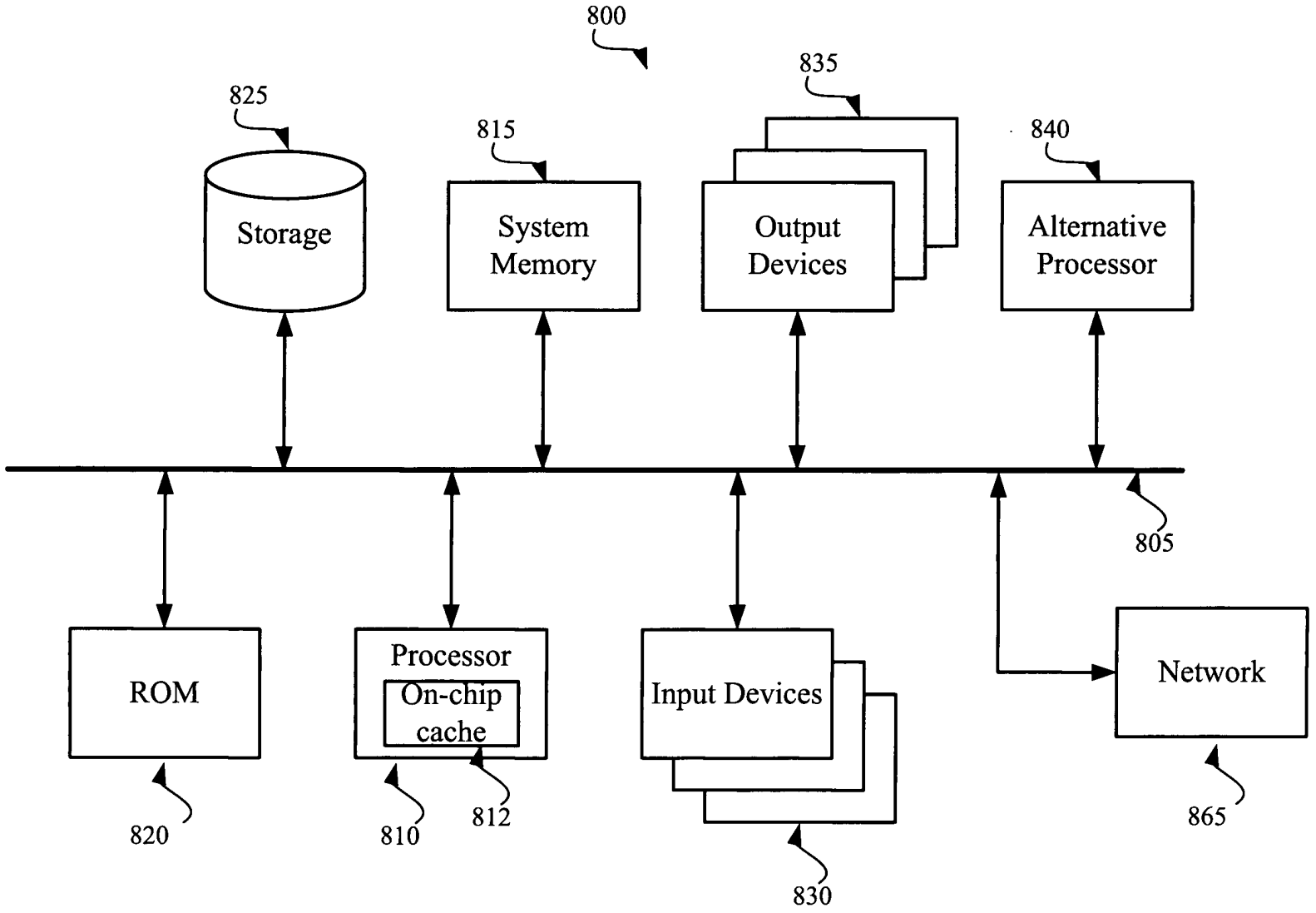
800
825
Storage
815
System Memory
835
Output Devices
840
Alternative Processor
805
ROM
820
Processor
On-chip cache
810
812
Input Devices
830
Network
865

Figure 8